

EUEPHYRA (to follow the genus *Ephyra*, II. p. 102).

Euephyra, Packard, Fifth Ann. Rep. Peab. Acad. Sci. p. 73 (1873); Report of U.S. Geol. Surv. Territ. x. p. 365, t. 4. fig. 5 (neurulation) (1876).

1. *Euephyra albidiscata*.

Euephyra albidiscata, Warren, Novit. Zool. iv. p. 438 (1897)¹.

Hab. COSTA RICA, Candelaria Mts. (*Underwood*¹).

The type of this species is in such worn condition that it can hardly be recognized, much less figured.

ANISODES (II. p. 102).

Anisodes globaria (II. p. 103).

To the localities given, add:—COSTA RICA, Candelaria Mts. (*Underwood*).

10. *Anisodes chaon*, sp. n. (Tab. XCIX. fig. 5, ♂.)

Male. Primaries and secondaries pale brownish-fawn-colour, both wings with a submarginal zigzag greyish-white line, in some parts almost broken into spots, the primaries also with a similar line close to the base, the fringe pale fawn-colour; the underside as above, but much paler, and with the greyish-white lines replaced by minute black dots: head, antennæ, thorax, and abdomen pale brownish-fawn-colour. Expanse $1\frac{1}{4}$ inch.

Hab. PANAMA, Volcan de Chiriqui 2000 feet (*Champion*).

One specimen.

11. *Anisodes beon*, sp. n. (Tab. XCIX. fig. 7, ♀.)

Female. Primaries and secondaries pale fawn-colour, thickly irrorated with darker scales, a large greyish spot on the primaries near the apex extending along the outer margin almost to the anal angle, the fringe of both wings greyish: head, antennæ, thorax, and abdomen pale brown. Expanse 1 inch.

Hab. PANAMA, Volcan de Chiriqui 2000 feet (*Champion*).

One specimen.

12. *Anisodes albocostata*, sp. n. (Tab. XCIX. fig. 8.)

Primaries and secondaries pale reddish-brown, darker round the outer margins; the primaries with the costal margin from the base to the apex broadly bordered with white, two narrow brown lines edged with grey crossing the wing from the costal to the inner margin—the first near the base, the second beyond the cell,—a dark brown line at the end of the cell, and a waved submarginal line extending from near the apex to the inner margin close to the anal angle, the ends of the veins spotted with black, the fringe reddish-brown; the secondaries crossed about the middle by a dark brown line edged with grey on the outer side, the veins with black points as on the primaries; the underside very much paler than above, and without the white costal margin to the primaries or the lines crossing the wings. Expanse $1\frac{1}{4}$ inch.

Hab. MEXICO, Amula in Guerrero 6000 feet (*H. H. Smith*).

Several specimens.

13. *Anisodes* (?) *osteria*, sp. n. (Tab. XCIX. fig. 9, ♀.)

Female. Primaries and secondaries reddish-fawn-colour, paler at the base; the primaries crossed from the costal to the inner margin by three darker brown lines, the outer line being somewhat indistinct;

BIOL. CENTR.-AMER., Heter., Vol. II., April 1899.

3 zz

the secondaries crossed from the costal to the inner margin by two dark brown lines; the fringe reddish-fawn-colour; the underside much paler than above, and without the lines crossing the wings: head, antennæ, thorax, and abdomen reddish-fawn-colour. Expanse $\frac{3}{4}$ inch.

Hab. MEXICO, Presidio de Mazatlan (*Forrer*).

Two specimens.

14. **Anisodes (?) sobrina**, sp. n. (Tab. XCIX. figg. 10, ♂; 11, ♀.)

Male. Primaries and secondaries brown; the primaries crossed from the costal to the inner margin by two reddish-brown lines edged on the outer side with yellow—the first line near the base, the second beyond the middle,—and with a blackish streak at the end of the cell, and a very faint submarginal zigzag line extending from the apex to the anal angle, the marginal line reddish-brown; the secondaries crossed below the middle from the costal margin near the apex to the anal angle by a reddish-brown line edged on the outer side with yellow; the fringe reddish-brown; the underside much paler than above, and without the lines crossing the wings: head, antennæ, thorax, and abdomen reddish-brown, the abdomen with a central yellow line extending from the base to the anus.—*Female.* Very similar to the male, but paler in colour, and with all the lines crossing the wings blackish-brown. Expanse, ♂ $1\frac{1}{4}$, ♀ $1\frac{4}{10}$ inch.

Hab. COSTA RICA, Volcan de Irazu 6000 to 7000 feet (*Rogers*).

One pair.

15. **Anisodes (?) miniata**, sp. n. (Tab. XCIX. fig. 12, ♂.)

Male. Primaries and secondaries dark purplish-brown; the primaries crossed from the costal to the inner margin by two fine yellow lines—the first near the base, the second beyond the middle,—and with a yellowish streak at the end of the cell; the secondaries crossed below the middle from the costal to the inner margin by a fine yellow line; the fringes of both wings dark purplish-brown; the underside much paler than above, with the lines crossing the wings very faint, the inner margin of the secondaries greyish: head, antennæ, thorax, and abdomen dark purplish-brown. Expanse $1\frac{1}{10}$ inch.

Hab. PANAMA, Volcan de Chiriqui 2000 to 3000 feet (*Champion*).

Two males. This species is very like *A. sobrina*, but the lines on the wings are in an entirely different position.

ASELLODES (II. p. 105).

Asellodes fenestraria (II. p. 105).

To the localities given, add:—MEXICO, Jalapa (*M. Trujillo*).

TRYGODES (II. p. 105).

Trygodes auxesia (II. p. 108).

To the localities given, add:—COSTA RICA, Candelaria Mts. (*Underwood*).

EOIS (II. p. 108).

Eois pyraustaria (II. p. 108).

To the localities given, add:—MEXICO, Teapa in Tabasco (*H. H. Smith*).

Eois fagenaria (II. p. 109).

To the localities given, add:—COSTA RICA, Santa Clara Valley 1200 feet (*Zürcher*).

13. **Eois albipunctata**, sp. n. (Tab. XCIX. fig. 14, ♀.)

Female. Primaries brownish-fawn-colour, crossed about the middle from the cell to the inner margin by a rather wide reddish-orange-coloured band, and with a large triangular silvery-white spot at the end of the cell, and two fine submarginal reddish-brown lines extending from near the apex to the middle of the inner margin, the outer margin and fringe from the apex to the anal angle bright yellow; secondaries brownish-fawn-colour, with a large silvery-white triangular spot close to the base surrounded by reddish-orange lines, the outer margin and fringe bright yellow: head, antennæ, thorax, and abdomen brownish-fawn-colour. Expanse $\frac{3}{4}$ inch.

Hab. PANAMA, Bugaba (*Champion*).

One specimen. This insect may be at once distinguished from all the other described species known to me by the silvery-white spots on the wings.

DOCHEPHORA (to follow the genus *Cambogia*, II. p. 115).

Dochephora, Warren, Novit. Zool. ii. p. 108 (1895).

1. **Dochephora pilosa**. (Tab. XCIX. fig. 15, ♂.)

Dochephora pilosa, Warren, Novit. Zool. iv. p. 449 (1897)¹.

Hab. MEXICO, Jalapa (*M. Trujillo*); COSTA RICA, Candelaria Mts. (*Underwood*¹).

We figure a male from Jalapa.

ASTHENA (II. p. 115).

3. **Asthena (?) tharossa**, sp. n. (Tab. XCIX. fig. 16.)

Primaries and secondaries pale fawn-colour, crossed about the middle by two very indistinct brownish waved lines, both wings with a submarginal row of very minute black dots and a small black dot at the end of the cell: head, antennæ, thorax, and abdomen fawn-colour. Expanse $\frac{3}{4}$ inch.

Hab. PANAMA, Volcan de Chiriqui 4000 feet (*Champion*).

One specimen.

4. **Asthena (?) malvina**, sp. n. (Tab. XCIX. fig. 13, ♂.)

Male. Primaries and secondaries pale fawn-colour; the primaries crossed from the costal to the inner margin by three yellowish-brown lines—the first and third zigzag, the second broad and at about the middle of the wing,—and with a small white streak at the end of the cell and a large ill-defined blackish spot on the inner margin close to the anal angle, the fringe yellowish-fawn-colour; the secondaries crossed by two faint lines, the fringe yellowish: head, antennæ, thorax, and abdomen fawn-colour. Expanse 1 inch.

Hab. MEXICO, Presidio de Mazatlan (*Forrer*); PANAMA, Bugaba (*Champion*).

The Bugaba specimen is figured.

5. **Asthena (?) sylvia**, sp. n. (Tab. XCIX. fig. 17.)

Primaries and secondaries pale greyish-fawn-colour, irrorated with reddish-brown scales; the primaries with a reddish-brown spot on the outer margin below the apex and a small white spot at the end of the cell; the secondaries crossed by two dark reddish-brown waved lines, the outer half of the wing thickly

irrorated with reddish-brown scales: head, antennæ, thorax, and legs pale fawn-colour (the abdomen wanting). Expanse 1 inch.

Hab. MEXICO, La Venta in Guerrero 800 feet (*H. H. Smith*).

One specimen.

ACIDALIA (II. p. 115).

Acidalia umbilicata (II. p. 116).

Acidalia nigroapicata, Thierry-Mieg, *Le Naturaliste*, 1892, p. 235¹.

The types of *A. nigroapicata*, Thierry-Mieg, were from Chiriqui¹, whence I have already recorded this species.

13. ***Acidalia minuscula***.

Acidalia minuscula, Thierry-Mieg, *Le Naturaliste*, 1892, p. 235 (Oct. 1st)¹.

Acidalia carna, *antea*, ii. p. 118 (Nov. 1892).

M. Thierry-Mieg's name has one month's priority. His types were also from Chiriqui¹.

Acidalia retractaria (II. p. 121).

To the localities given, add:—GUATEMALA, Dueñas, Volcan de Atitlan (*Champion*).

34. ***Acidalia abornata***, var. ***candida***.

Craspedia abornata, ab. *candida*, Warren, *Novit. Zool.* iv. p. 432 (1897)¹.

Hab. COSTA RICA, Candelaria Mts. (*Underwood*¹).

ORUDIZA (II. p. 124).

Orudiza placidaria (II. p. 124).

To the localities given, add:—BRITISH HONDURAS, Belize (*Sir Alfred Moloney, in mus. D.*).

EPIPLEMA (II. p. 125).

Epiplema birostrata (II. p. 125).

To the localities given, add:—COSTA RICA, Candelaria Mts. (*Underwood*).

EROSIA (II. p. 125).

15. ***Erosia*** (?) ***imella***, sp. n. (Tab. XCIX. fig. 18, ♀.)

Female. Primaries and secondaries brown; the primaries crossed from the costal to the inner margin by two narrow reddish-brown lines—the first near the base, the second beyond the middle, the latter continued across the middle of the secondaries; the marginal line of both wings dark brown, the fringe greyish-brown; the underside as above, but with the lines very indistinct. Expanse 1 inch.

Hab. GUATEMALA, San Gerónimo (*Champion*).

One specimen.

SCHIDAX (II. p. 128).

Schidax squammaria (II. p. 128).

To the localities given, add:—COSTA RICA, Candelaria Mts. (*Underwood*).

SEMIOTHISA (II. p. 129).

Semiothisa stimulata (II. p. 129).

To the localities given, add:—COSTA RICA, Candelaria Mts. (*Underwood*).

Semiothisa carpo (II. p. 130).

Semiothisa fidelis, Warren, Novit. Zool. iv. p. 479 (1897)¹.

Mr. Warren's types of *S. fidelis* were from Costa Rica¹, whence I have already recorded the species.

Semiothisa acutaria (II. p. 133).

To the localities given, add:—GUATEMALA, in the city (*Rodriguez, in mus. D.*); COSTA RICA, Candelaria Mts. (*Underwood*).

Semiothisa agrammata (II. p. 133).

To the localities given, add:—GUATEMALA, in the city (*Rodriguez, in mus. D.*).

20. **Semiothisa masonata**.

Semiothisa masonata, Schaus, Journ. New York Ent. Soc. v. p. 163 (1897)¹.

Hab. MEXICO, Jalapa (*coll. Schaus*¹).

21. **Semiothisa oaxacana**.

Semiothisa oaxacana, Schaus, Journ. New York Ent. Soc. vi. p. 146 (1898)¹.

Hab. MEXICO, Oaxaca (*coll. Schaus*¹).

TEPHRINA (to precede the genus *Thamnonoma*, II. p. 134).

Tephрина, Guenée, Sp. gén. des Lép. x. p. 96 (1857); Walker, Cat. xxiii. p. 951.

1. **Tephрина submarcata**.

Tephрина submarcata, Schaus, Journ. New York Ent. Soc. vi. p. 149 (1898)¹.

Hab. MEXICO, Guadalajara (*coll. Schaus*¹).

2. **Tephрина griseata**.

Tephрина griseata, Schaus, Journ. New York Ent. Soc. vi. p. 149 (1898)¹.

Hab. MEXICO, Jalapa, Oaxaca (*coll. Schaus*¹).

3. **Tephрина guararana**.

Tephрина guararana, Schaus, Journ. New York Ent. Soc. vi. p. 149 (1898)¹.

Hab. MEXICO, Oaxaca, Guadalajara (*coll. Schaus*¹).

PACHYDIA (II. p. 135).

Pachydia abdominalia (II. p. 135).

Perissopteryx delusa, Warren, Novit. Zool. iv. p. 477 (1897)¹.

To the localities given, add:—COSTA RICA, Candelaria Mts. (*Underwood*¹).

9. **Pachydia nigristicta**. (Tab. XCIX. fig. 20.)

Thysanopyga nigristicta, Warren, Novit. Zool. iv. p. 477 (1897)¹.

Hab. MEXICO, Teapa (*H. H. Smith*); COSTA RICA, Candelaria Mts. (*Underwood*¹), Volcan de Irazu (*Rogers*).

A specimen from the Volcan de Irazu is figured.

GORYTODES (II. p. 138).

3. **Gorytodes (?) mexicana**, sp. n. (Tab. XCIX. fig. 19, ♂.)

Male. Primaries and secondaries greyish-brown; the primaries crossed beyond the middle from the costal to the inner margin by a narrow darker brown line, and with a small black dot at the end of the cell, the fringe of both wings greyish: head, thorax, and abdomen greyish-brown, the antennæ blackish-brown. Expanse $1\frac{1}{2}$ inch.

Hab. MEXICO, Bolaños in Jalisco (*Richardson*).

One specimen.

LEPIODES (II. p. 148).

3. **Lepiodes (?) maxima**, sp. n. (Tab. XCIX. fig. 21.)

Female. Primaries reddish-brown, crossed about the middle by a wide greyish-black band which is edged on both sides with greyish scales, a black spot at the end of the cell, the fringe greyish-brown; secondaries pale greyish-brown, darker at the anal angle: head, thorax, abdomen, and legs greyish-brown, the antennæ black. Expanse $1\frac{1}{4}$ inch.

Hab. PANAMA, Volcan de Chiriqui 2000–3000 feet (*Champion*).

Two specimens, one much darker than the other.

4. **Lepiodes (?) unicolor**, sp. n. (Tab. XCIX. fig. 22.)

Male. Primaries and secondaries pale brownish-grey, each with a round blackish spot at the end of the cell: head, thorax, abdomen, and legs grey, the antennæ blackish-brown.—*Female.* Similar to the male, but much larger. Expanse, ♂ $1\frac{1}{2}$, ♀ 2 inches.

Hab. MEXICO, Presidio de Mazatlan (*Forrer*).

5. **Lepiodes (?) punctata**, sp. n. (Tab. XCIX. fig. 23, ♂.)

Male. Primaries and secondaries dark brown; the primaries with a raised tuft of black scales at the end of the cell, beyond which a fine black line crosses the wing from the costal to the inner margin: head, thorax, abdomen, and legs dark brown.—*Female.* Very similar to the male, but paler. Expanse, ♂ ♀, $1\frac{1}{4}$ inch.

Hab. MEXICO, Jalapa (*Höge, M. Trujillo*), Teapa in Tabasco (*H. H. Smith*); GUATEMALA, Volcan de Atitlan (*Champion*); COSTA RICA, Volcan de Irazu (*Rogers*).

We figure a male from Irazu.

CLEOMANTES (II. p. 149).

1. *Cleomantes leuconotula*.

Siculodes (Zeuzerodes) leuconotula, Pagenst. Iris, v. p. 80, t. 1. fig. 15 (♀) (1892)¹.

Rhodoneura leuconotula, Hampson, P. Z. S. 1897, p. 617².

Siculodes (Zeuzerodes) fumatilis, Pagenst. Iris, v. p. 81 (♂)³ (part.).

Rhodoneura fumatilis, Hampson, P. Z. S. 1897, p. 617⁴.

Cleomantes mærens, Druce, anteà, ii. p. 149 (May, 1893)⁵.

To the localities given, add:—PANAMA^{2 4}, Chiriqui (*Trötsch, in mus. Staudinger*^{1 3}).

I am indebted to Dr. Staudinger for sending me Pagenstecker's types for comparison. I have no doubt they are the sexes of one species. His names have nearly a year's priority over mine. The Brazilian specimens of *S. fumatilis* (♂ ♀) mentioned by him probably belong to a different species.

LARENTIA (II. p. 150).

6. *Larentia narosa*, sp. n. (Tab. XCIX. fig. 24.)

Female. Primaries pale greyish-white, crossed beyond the middle from the costal to the inner margin by two pale brown bands—the first, at the end of the cell, with several small black points; secondaries very pale fawn-colour: head, thorax, abdomen, and legs greyish-brown, the antennæ grey. Expanse 1 inch.

Hab. MEXICO, Northern Sonora (*Morrison*).

One specimen.

HETERUSIA (II. p. 151).

Heterusia anicata (II. p. 152).

To the localities given, add:—COSTA RICA, Candelaria Mts. (*Underwood*).

PHIBALAPTERYX (II. p. 154).

Phibalapteryx effluata (II. p. 154).

To the localities given, add:—MEXICO, Cuesta de Misantla (*M. Trujillo*).

SCOTOSIA (II. p. 155).

2. *Scotosia gavara*, sp. n. (Tab. XCIX. fig. 25, ♂.)

Male. Primaries pale brownish-fawn-colour, the costal margin and a large spot at the apex much paler, several faint brown lines crossing the wing about the middle from the costal to the inner margin and a very small black dot at the end of the cell; secondaries pale fawn-colour, crossed from the costal to the inner margin by very indistinct fine waved brown lines: head, thorax, abdomen, and legs pale brownish-fawn-colour, the antennæ black.—*Female*. Very similar to the male. Expanse, ♂ ♀, 1½ inch.

Hab. PANAMA, Volcan de Chiriqui 2000–3000 feet (*Champion*).

ISCHNOPTERYX (II. p. 157).

Ischnopteryx chlorata (II. p. 157).

To the localities given, add:—BRITISH HONDURAS, Belize (*Sir Alfred Moloney, in mus. D.*); COSTA RICA, Santa Clara Valley (*Zürcher*).

HAMMAPTERA (II. p. 160).

Hammaptera probataria (II. p. 160).

Hammaptera subolivescens, Warren, Novit. Zool. iv. p. 453 (1897)¹.

Mr. Warren's types of *H. subolivescens* were from Costa Rica and Paraguay¹. I have already recorded the species from the first-mentioned locality.

Hammaptera subguttaria (II. p. 161).

Hammaptera pallidipars, Warren, Novit. Zool. iv. p. 452 (1897)¹.

Mr. Warren's types of *H. pallidipars* were from Costa Rica and Colombia, whence I have already recorded the species.

RHOPALISTA (to follow the genus *Hammaptera*, II. p. 161).

Rhopalista, Warren, Novit. Zool. iv. p. 455 (1897).

1. **Rhopalista fulvifusa**. (Tab. XCIX. fig. 26.)

Rhopalista fulvifusa, Warren, Novit. Zool. iv. p. 455¹.

Hab. COSTA RICA (*Underwood*¹).

The type is figured.

EPIRRHOE (II. p. 165).

14. **Epirrhoe crispa**, sp. n. (Tab. XCIX. fig. 27.)

Female. Primaries brown, shaded with yellow at the base and beyond the cell, a zigzag fine submarginal line extending from the apex to the anal angle; secondaries bright orange, the costal margin, apex, anal angle, and inner margin broadly bordered with black: head, thorax, and abdomen yellowish-brown, the latter near the apex and the antennæ black, the legs yellowish-brown. Expanse $1\frac{1}{2}$ inch.

Hab. COSTA RICA, Candelaria Mts. (*Underwood*).

One specimen.

PSALIODES (II. p. 170).

21. **Psaliodes myxa**, sp. n. (Tab. XCIX. fig. 28.)

Male. Primaries dark brown, with two silvery-white dots on the costal margin—the first near the base, the second nearest the apex,—and with a silvery-white spot on the inner margin close to the base; secondaries paler brown; the fringe of both wings alternately dark brown and white: head, antennæ, thorax, abdomen, and legs dark brown. Expanse 1 inch.

Hab. COSTA RICA, Candelaria Mts. (*Underwood*).